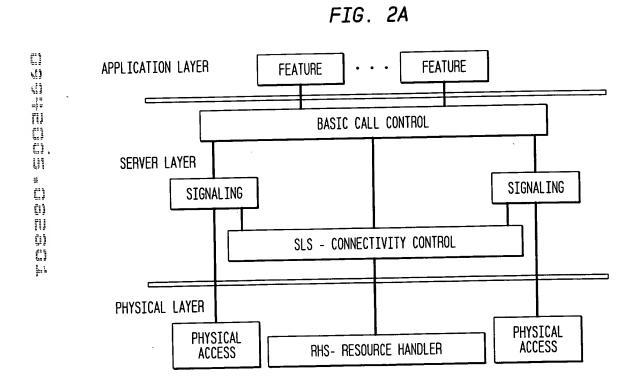


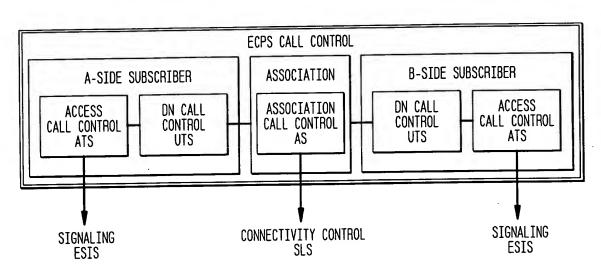
1

1992P07463US08 2/15

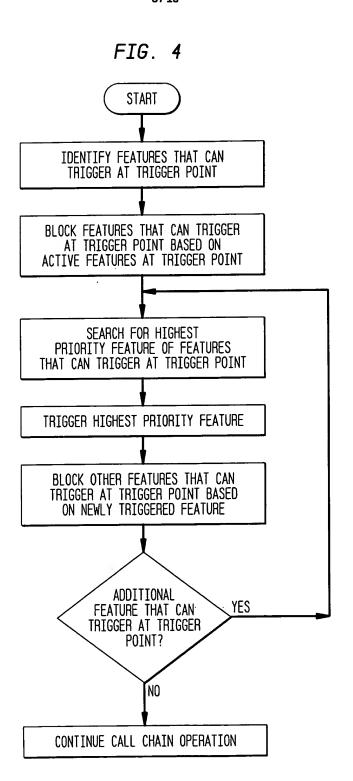


3/15 PHYSICAL ACCESS ESIS ATS SWITCHING NETWORK (S) STATISTICS FORMATING B-SIDE SUBSCRIBER DATABASE UTS FEATURE CONNECTIVITY CONTROL (SLS) BILLING AND STATISTICS TRANSLATION DATABASE FIG. 2B S FEATURE ECPS HARDWARE RESOURCES (TOG, PH, ETC.) RESOURCE HANDLING (RHS) A-SIDE SUBSCRIBER DATABASE BILLING FORMATTING APPLICATION LAYER PHYSICAL ACCESS SERVER LAYER ESIS PHYSICAL LAYER

FIG. 2C



## 1992P07463US08 **6/15**



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#### 1992P07463US08

7/15

## FIG. 5

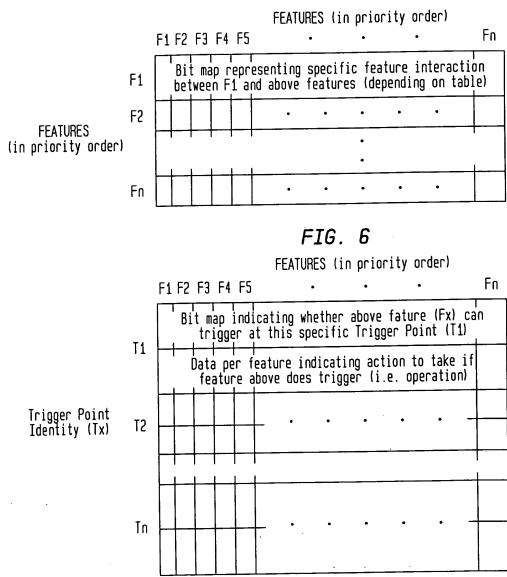


FIG. 7

FEATURES (in priority order)

F1 F2 F3 F4 F5	•	•	•	Fn
Bit map	representing	specific	features	

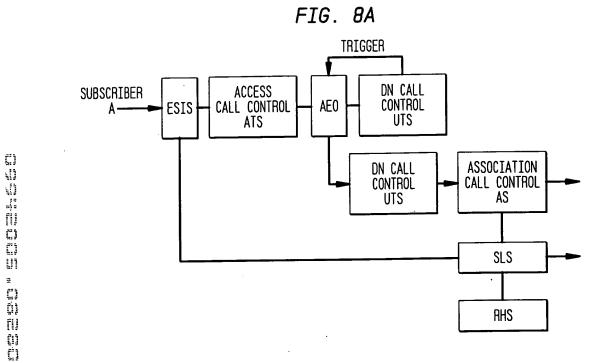
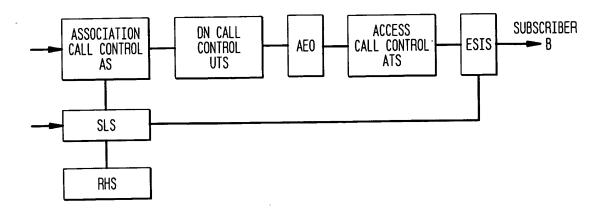


FIG. 8B



#### 9/15

#### FIG. 8C

INITIAL CONDITION: A-party is busy with a call and subscribes to DND, CF, and CW. An operator activates AEO and calls the A-party (i.e. AEO has set a persistent trigger condition at the "SUBSCRIBER BUSY" trigger point).

TRIGGER POINT:

SUBSCRIBER BUSY (A-party)

STEP (1) Determine features which could trigger at this Point Table, subscribed features, requested fo	s trigger point based on Trigger eatures and persistent features.
SUBSCRIBER BUSY TRIGGER POINT ROW	N Y Y Y
SUBSCRIBER FEATURE BITMAP	N Y Y Y  OR
PERSISTENT FEATURE BITMAP	YNNN
RESULT	Y N N N

# FIG. 8D

STEP (2) Block features based on active features.

The RESULT above remains unchanged since there are no active features on the called line.  $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2\pi i} \left( \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2\pi i} \left( \frac{1}{2$ 

### 1992P07463US08 **10/15**

#### FIG. 8E

STEP (3a) DO WHILE there are features to trigger

SEARCH (RESULT bit map) = AEO (AEO is most significant bit set to Y)

STEP (3b) Trigger highest priority feature (based on Trigger Point Table lookup)

Based on trigger point table entry for the AEO, feature operation 1 is performed; AEO software is triggered which controls termination to the A-party.

STEP (3c) Block features based on newly triggered feature

OLD RESULT

AEO TRIGGERED FEATURE BLOCKING ROW

N N N N

N

NEW RESULT

N N N N

N

At this point the NEW RESULT bit map is empty indicating no further feature

triggers are required

## 1992P07463US08 11/15

FIG. 8F

FEATURE PRIORITY LIST (1 being highest priority)

- Attendant Emergency Override (AEO) Do Not Disturb (DND) Call Forwarding (CF) Call Waiting (CW)

FIG. 8G

S	SUBSCRIBER FEATURE BITMAP													
	AEO	DND	CF	CW										
	N	Y	Y	Υ										

FIG. 8H

TRIGGERED FEATURE BLOCKING TABLE

		AE0	DND	CF	CW
	AE0	N	N	N	N
	DND	Υ	N	N	N
Ì	CF	Υ	Υ	N	N
	CW	Υ	Υ	Y	N

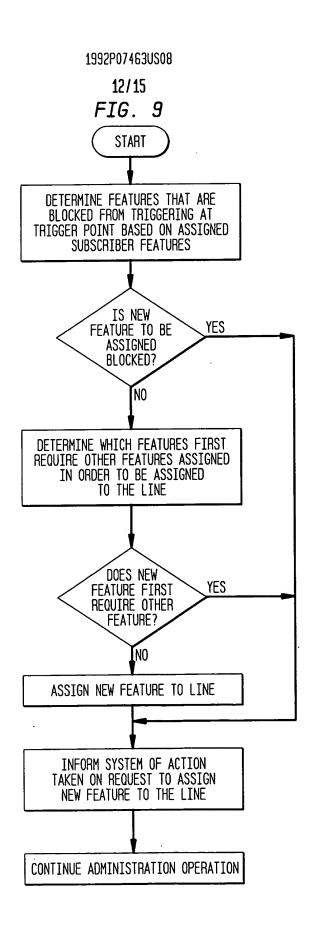
'N' IMPLIES FEATURE IS BLOCKED

FIG. 8I

TRIGGER POINT TABLE

	AE0	DND	CF	CW
	N	Υ	Υ	Υ
TRIGGER PT SUBSCRIBER BUSY	A D	PPORT. EO: ac ND: ac CF: ac	ction: ction: tion=	=1 =1 1

action 1 = Trigger Related Feature



#### 13/15

#### FIG. 10A

# FEATURE PRIORITY (1 BEING HIGH PRIORITY)

#### **FEATURE**

1 2 3	MANUAL LINE (HOTLINE) VOICE DATA PROTECTION (VDP) ATTENDANT EMERGENCY OVERRIDE (AEO)
	DENIED TERMINATION (DT)
4	
5	DO NOT DISTURB (DND)
6	NOT MAKE BUSY KEY (NMBK)
7	CALL FORWARD INHIBIT MAKE BUSY (CFIMB)
Ä	MAKE BUSY KEY (MBK)

CALL FORWARD INHIBIT LINE BUSY (CFILB)
DIAL CALL WAITING (DCW)
SELECTIVE CALL FORWARD (SCF)
CALL FORWARD VARIABLE (CFV) 10 11

## FIG. 10B

#### FEATURES (IN PRIORITY ORDER)

	TENTONEO TENTONEO													
	1	2	3	4	5	6	7	8	9	10	11	12		
FEATURE POSSIBLE	Υ	Υ	Υ	Ϋ́	Y	Y	Υ	Υ	Y	Y	Y	Υ		

## FIG. 10C

#### FEATURES (IN PRIORITY ORDER)

	1	2	3	4	5	6	7	8	9	10	11	12
SUBSCRIBER FEATURE	N	N	N	N	N	N	N	N	N	N	N	Υ

# 1992P07463US08 **14/15**

FIG. 10D

Features (in priority order)

		1	2	3	4	5	6.	7	8	9	10	11	12
1	HOTLINE												
2	VDP												
3	AE0									,			
4	DT												
5	DND												
6	NMBK												
7	CFIMB	Υ	Y	Υ	N	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
8	MBK	Υ	Υ	Y	Y	Υ	Υ	Υ	Υ	Υ	Υ	Ÿ.	Υ
9	CFILB												
10	DCW												
11	SCF												
12	CFV	N	Υ	Υ	N	Υ	Υ	Y	Y	Y	Υ	Y	Y

FIG. 10E

Feature Possible (initial condition)	=	YYY	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Y	Y
								1A	ND								
cfv Admin Blck Tble entry	=	NY	/ N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Y	Υ
											_						
RESULT (Feat Possible)	=	N Y	YN	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	γ	Υ	Υ	Υ	Υ

# 15/15

# FIG. 10F

Features (in priority order)

		1	2	3	4	5	6	7	8	9	10	11	12
1	HOTLINE												
2	VDP												
3	AE0						_						
4	DT					٠		٠					
5	DND												
6	NMBK		!										
7	CFIMB	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N
8	MBK	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
9	CFILB												
10	DCW												
11	SCF												
12	CFV	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ

FIG. 10G

CFIMB Mutually Inc Tble Entry	=	ΥΥ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	Y	Υ	Υ	Υ	Υ	
									AN	ID									_
Subscriber Feature	=	NN	N	N	N	N	N	N	N	N	N	Υ	N	N	N	N	N	N	
						•			XC	)R					-				
CFIMB Mutually Inc Tble Entry	=	YY	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	
																			_
RESULT	=	N N	N	N	N	N	N	Υ	N	N	N	N	N	N	N	N	N	N	